APPENDIX D

ADID Wetlands

TABLE D-1
ADID Wetland Impacts Per Alternative

ADID Number	No-Action Ha (Ac)	IL 53 Freeway/Tollway Ha (Ac)	IL 83/US 45 with US 12 Ha (Ac)
44	0.40 (1.00)	—	—
61	0.01 (0.03)	—	—
91	1.1 (2.72)	—	0.28 (0.70)
94	>0.01	—	0.02 (0.04)
96	0.15 (0.37)	—	0.06 (0.16)
99	—	—	0.01 (0.03)
106	0.37 (0.92)	—	0.06 (0.15)
108	—	—	0.40 (1.02)
113	0.32 (0.79)	—	—
128	—	—	0.04 (0.11)
143	—	0.66 (1.63)	0.24 (0.59)
151	—	—	0.17 (0.42)
158	—	—	0.01 (0.03)
168	0.02 (0.05)	—	—
169	0.86 (2.13)	0.25 (0.62)	—
170	0.57 (1.42)	0.2 (0.51)	—
173	0.06 (0.15)	—	—
175	0.55 (1.36)	—	—
180	—	2.2 (5.4)	—
183	—	—	0.25 (0.63)
187	0.78 (1.94)	—	—
198	—	—	0.07 (0.17)
200	—	0.13 (0.33)	0.08 (0.18)
TOTAL	**5.2 (12.9)**	**3.46 (8.55)**	**1.7 (4.2)**

D.1 IL 53 Corridor—Des Plaines River Watershed

D.1.1 ADID Wetland 143—Indian Creek/Kildeer Creek

This wetland is described by the Lake County ADID study as a stream community that contains a sedge meadow and an emergent marsh dominated by bur reed (*Sparganium*) and

arrowhead (*Sagittaria*). This wetland harbors threatened or endangered species of plants and is considered a high quality stream. Other functions performed by this wetland are shoreline / bank stabilization and sediment toxicant retention. The total wetland size in the vicinity of the project is 63.0 ha (155.6 ac), but extends for long distances outside the study area. Approximately 81.3 ha (201 ac) of the large wetland complex are considered ADID.

Due to its configuration relative to the proposed roadway, this wetland is impacted in four separate areas. These were identified in the field as 53-43, 53-67, 83-19 and 83-40. Wetland segments 53-43 and 53-67 were assessed as being a high to moderate quality riparian complex with depressional areas. Segments 83-19 and 83-40 were assessed as being low quality stream and adjacent depressional areas during the field verification. Approximately 0.28 ha (0.69 ac) of 53-43, 0.02 ha (0.04 ac) of 53-67, 0.20 ha (0.50 ac) of 83-19, and 0.16 ha (0.40 ac) of 83-40 would be impacted, totaling 0.66 ha (1.63 ac) or less than 0.9-percent of ADID wetland 180. The proposed impacts are the result of mainline roadway construction and frontage road construction.

While there is no overall functional loss to this wetland, there is minimal impact to functions as a result of the proposed project. As portions of this wetland harbors endangered plant species and high quality plant communities, additional consultation with the Illinois Department of Natural Resources would need to be conducted to determine the potential for impacting both the plant species and the habitat that the ADID wetland provides. Additional minimization and avoidance strategies may need to be developed during susequent planning and design work to reduce or avoid the proposed impacts to this ADID site from this alternate.

D.1.2 ADID Wetland 169

The Lake County ADID Study identifies this wetland as a sedge meadow. The wetland harbors threatened or endangered species of plants. No other functions were identified for this wetland by the ADID study. The wetland in the vicinity of the project size is 1.4 ha (3.4 ac) but extends beyond the proposed project area. Approximately 17.2 ha (42.4 ac) of this large complex are considered ADID. Due to its configuration relative to the proposed roadway, this wetland is impacted in two separate areas. These were identified in the field as 53-21 and 53-22. Wetland segment 53-21 was assessed as being a high quality open water depressional wetland and segment 53-22 was considered to be a low quality depressional area during the field verification. Approximately 0.11 ha (0.26 ac) of 53-21, and 0.15 ha (0.36 ac) of 53-22 would be impacted, totaling 0.25 ha (0.62 ac) or 1.5 percent of the total wetland area of ADID wetland 169. The proposed impacts are the result of mainline roadway construction and adjacent frontage roads.

While there is no overall functional loss to this wetland, there is minimal impact to functions as a result of the proposed project. As portions of this wetland harbor endangered plant species and high quality plant communities, additional consultation with the Illinois Department of Natural Resources would need to be conducted to determine the potential for impacting both the plant species and the habitat that the ADID wetland provides. Additional minimization and avoidance strategies may need to be developed during subsequent planning and design work to reduce or avoid the proposed impacts to this ADID site from this alternate.

D.1.2 ADID Wetland 170—Reed-Turner Nature Preserve

This wetland contains a sedge meadow. Only a portion of this wetland is included within the Nature Preserve confines. This wetland harbors threatened or endangered species of plants and contains a high quality plant community. Other functions performed by this wetland are shoreline / bank stabilization, sediment toxicant retention and nutrient removal and transport. The total wetland size within the study vicinity is 38.7 ha (95.6 ac) and extends outside the proposed project. Approximately 87.8 ha (217 ac) of the total wetland area are considered ADID. The project would directly impact approximately 0.2 ha (0.51 ac) of this wetland. The wetland in the vicinity of the proposed roadway (53-19) was characterized as open water / stream channel of moderate quality during the field verification. The impacts are the result of the mainline roadway construction and frontage roads construction. Total impacts to this ADID wetland from this alternate are less than 0.24-percent. As a result, no loss of wetland functions is anticipated.

D.1.3 ADID Wetland 180—Buffalo Creek Complex

The complex contains a sedge meadow and emergent marsh areas. This wetland harbors threatened or endangered species of plants and contains a high quality plant community. Other functions performed by this wetland are shoreline / bank stabilization, sediment toxicant retention and nutrient removal and transport. The total wetland size is 79.4 ha (196.3 ac), of which 63.5 ha (157 ac) are considered ADID. Due to its configuration relative to the proposed roadway, this wetland is impacted in three separate areas. These were identified in the field as 53-7, 53-8, and 53-11. The wetland segments were assessed as being a high to moderate quality stream complex during the field verification. Approximately 0.22 ha (0.54 ac) of 53-7, 0.36 ha (0.9 ac) of 53-8, and 1.6 ha (4.0 ac) of 53-11 would be impacted, totaling 2.2 ha (5.4 ac) of ADID wetland 180. This represents less than 2.8-percent of the total wetland area. The proposed impacts are the result of mainline roadway construction and grade separation of the channel.

While there is no overall functional loss to this wetland, there is minimal impact to functions as a result of the proposed project. As portions of this wetland harbors endangered plant species and high quality plant communities, additional consultation with the Illinois Department of Natural Resources would need to be conducted to determine the potential for impacting both the plant species and the habitat that the ADID wetland provides. Additional minimization and avoidance strategies may need to be developed during subsequent planning and design work to reduce or avoid the proposed impacts to this ADID site from this alternate.

D.2 IL 120 Corridor—Des Plaines River Watershed

D.2.1 ADID Wetland 200

This wetland is described by the Lake County ADID study as deep marsh dominated by cattails. This wetland harbors several species of State threatened or endangered species of birds. Other functions performed by this wetland are sediment toxicant trapping and stormwater storage. The total wetland size is 7.4 ha (18.3 ac) of which 7.0 ha (17.4 ac) are considered ADID. The project would directly impact approximately 0.13 ha (0.33 ac) of this

wetland. The wetland in the vicinity of the proposed roadway (120-4) was characterized as predominantly a cattail marsh of low quality during the field verification. The impacts are as a result of the construction of the mainline roadway and associated grading and embankments. The loss of 0.13 ha (0.33 ac) results in less than 1.9-percent of the total wetland. As a result, minimal impacts to the functions of this wetland are anticipated.

D.3 IL 83 Corridor—Des Plaines River Watershed

D.3.1 ADID Wetland 143—Indian Creek/Killdeer Creek

Due to its configuration relative to the proposed roadway, this wetland is impacted in two separate areas. These were identified in the field as 83-19 and 83-40. These areas were assessed as being low quality stream and adjacent depressional areas during the field verification. Approximately 0.08 ha (0.19 ac) of 83-19 and 0.16 ha (0.40 ac) of 83-40 would be impacted, totaling 0.24 ha (0.59 ac) or less than 0.3-percent of ADID wetland 143. The proposed impacts are the result of mainline roadway construction and frontage road construction. While there is no overall functional loss to this wetland, there is minimal impact to functions as a result of the proposed project. As portions of this wetland harbors endangered plant species and high quality plant communities, additional consultation with the IDNR would need to be conducted to determine the potential for impacting both the plant species and the habitat that the ADID wetland provides. Additional minimization and avoidance strategies may need to be developed during subsequent planning and design work to reduce or avoid the proposed impacts to this ADID site from this alternate.

D.3.2 ADID Wetland 151

This wetland is described by the Lake County ADID study as a wetland and stream complex associated with Indian Creek. This portion of Indian Creek still retains a high degree of natural character and has not been altered to any significant degree. The primary functions of this wetland are shoreline bank stabilization and sediment/ toxicant retention. The description of this wetland was verified during the field screening that was conducted. The total wetland size in the vicinity of the project is 38.0 ha (94.0 ac), but extends for long distances outside the study area. Approximately 39.4 ha (97.4 ac) of the entire wetland complex are considered ADID. The proposed project would unavoidably impact approximately 0.17 ha (0.42 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway (83-27) was characterized as a depressional community of low quality during the field verification. The impacts are as a result of the construction of the mainline roadway and associated embankment. This alternative would impact approximately 0.4-percent of this ADID wetland in the vicinity of the project. As a result of this minimal impact level, no loss of wetland function would occur.

D.3.3 ADID Wetland 158 (Wetland 83-11)

This wetland is described by the Lake County ADID study as Indian Creek, which is a stream and wetland complex that maintains a high degree of natural character and is relatively undisturbed. The primary functions of this wetland are shoreline bank stabilization and sediment/ toxicant retention. The description of this wetland was verified during the field screening. The total wetland size in the vicinity of the project is 28.9 ha (71.5

ac), but extends for long distances outside the study area. Approximately 23.7 ha (58.6 ac) of the large wetland complex are considered ADID. The proposed project would unavoidably impact approximately 0.01 ha (0.03 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway was characterized as forested depression and stream community during the field verification. The impacts are as a result of the construction of the mainline roadway and associated embankment. The impacts to this wetland are less than 0.04-percent of the total wetland in the vicinity of the project alone. As a result of the small amount of proposed impacts, no loss of wetland function would occur.

D.4 US 12 Corridor

D.4.1 ADID Wetland 183

The Lake County ADID Study does not describe this wetland in detail. The wetland is located in the Buffalo Creek Watershed. The primary functions of this wetland are stormwater storage, shoreline bank stabilization and nutrient removal/transport (partial). The total wetland size in the vicinity of the project is 36.7 ha (90.6 ac), but extends for long distances outside the study area. Approximately 9.0 ha (22.2 ac) of the large wetland complex are considered ADID. The proposed project would unavoidably impact approximately 0.25 ha (0.63 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway (12-4) was characterized as an open water pond with adjacent emergent community during the field verification. The impacts are as a result of the construction of proposed frontage roads. This alternative impacts approximately 0.7-percent of the wetland in the vicinity of the project. As a result of this minimal impact, no loss of wetland function would occur.

D.5 IL 120

D.5.1 ADID Wetland 200

ADID Wetland 200 is described in the IL 53 Freeway/Tollway Alternative discussion above. The project would directly impact approximately 0.08 ha (0.18 ac) of this wetland at this particular location (120-4). The description of this wetland was verified during the field screening that was conducted. The wetland in the vicinity of the proposed roadway was characterized as a depressional, cattail marsh of low quality during the field verification. The impacts in this location are as a result of the construction of the mainline roadway. Less than one percent of this wetland would be impacted by the proposed alternative. As a result, no loss of wetland functions is anticipated.

D.6 IL 21 Corridor

D.6.1 ADID Wetland 94—Liberty Prairie

This complex includes a wet prairie dominated by switch grass (*Panicum virgatum*), blue joint grass (*Calamagrostris canadensis*) and prairie cordgrass (*Spartina pectinata*), a graminoid fen dominated by grass of Parnassus (*Parnassia glauca*), Riddell's Goldenrod (*Solidago riddellii*) and bottle brush sedge (*Carex lurida*) and a sedge meadow dominated by spotted Joe pye weed (*Eupatorium maculatum*) smash skullcap (*Scutellaria sp*.) marsh vetchling (*Lathyrus palustris*)

and tufted loosestrife (*Lysimachia thyrsiflora*). The primary functions of this wetland are stormwater storage and sediment/ toxicant retention. The biological values sited include the presence of state threatened or endangered plant species, an overall high quality plant community and is a designated INAI Site. The total wetland size is 2 ha (5 ac) in the vicinity of the project, but extends for long distances outside the study area. Approximately 55.4 ha (137.0 ac) of the overall wetland complex are considered ADID. The proposed project would unavoidably impact approximately 0.02 ha (0.04 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway (21-28) was characterized as an open water channel with adjacent forested wetlands during the field verification. The impacts are as a result of the construction of the mainline roadway and associated embankment.

The proposed impacts to ADID wetland 94 are less than 0.03-percent of the total wetland complex. This ADID wetland consists of high quality natural areas within a larger ADID wetland complex. While impacts to wetland functions would be considered minimal, additional minimization and avoidance measures should be developed during the engineering phase to reduce impacts to high quality areas. The habitat function that this wetland provides cannot be easily mitigated and therefore additional measures may be required to minimize functional impacts.

D.6.2 ADID Wetland 96—Tributary to Bull Creek

This wetland is described by the Lake County ADID study as a tributary to Bull Creek, which is part of a stream and wetland complex that includes Oak Openings Natural Area (ADID Site 88) and ADID Sites 93 and 95. The primary functions of this wetland are stormwater storage and sediment/ toxicant retention and is valued as a high quality stream complex. The description of this wetland was verified during the field screening that was conducted. The total wetland size in the vicinity of the project is 2.4 ha (5.9 ac), but extends for long distances outside the study area. Approximately 6.45 ha (15.9 ac) of the overall wetland complex are considered ADID. The proposed project would unavoidably impact approximately 0.06 ha (0.16 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway (21-18) was characterized as an open water channel with adjacent forested wetlands during the field verification. The impacts are as a result of the construction of the mainline roadway and associated embankment.

The approximate impacts to this ADID wetland are one percent of the total ADID area. This ADID wetland consists of high quality natural areas within a larger ADID wetland complex. While impacts to wetland functions would be considered minimal, additional minimization and avoidance measures should be developed during the engineering phase to reduce impacts to high quality areas. The habitat function that this wetland provides cannot be easily mitigated and therefore additional measures may be required to minimize functional impacts.

D.6.3 ADID Wetland 106—Bull Creek

This wetland is described by the Lake County ADID study as a stream complex that includes areas of state endangered fish species. The primary functions of this wetland are stormwater storage and sediment/toxicant retention. The description of this wetland was verified during the field screening that was conducted. The total wetland size in the vicinity of the project is 0.22 ha (0.55 ac), but extends for long distances outside the study area. Approximately 0.65 ha (1.61 ac) of the overall wetland complex are considered ADID. Due

to its configuration relative to the proposed roadway, this wetland is impacted in two separate areas. These were identified in the field as 21-17 and 21-28. These areas were assessed as partially a channelized stream and open water stream with minimal adjacent depressional wetlands.

Approximately 0.01 ha (0.02 ac) of 31-17 and 0.05 ha (0.13 ac) of 21-28 would be impacted, totaling 0.06 ha (0.15 ac) or roughly 9-percent of the ADID portion of this wetland complex, but a much lower percentage of the total wetland complex. While overall there is no functional loss to this wetland, there is minimal impact to the ADID portion of the wetland. As this wetland harbors an endangered fish species, additional consultation with the Illinois Department of Natural Resources would need to be conducted to determine the potential for impacting both the fish species and the habitat the ADID wetland provides. Additional minimization and avoidance strategies may need to be developed during subsequent planning and design work to reduce or avoid the proposed impacts to this ADID site from this alternate. The proposed impacts are the result of mainline roadway construction and associated embankment.

D.7 IL 60 Corridor and St. Mary's Road Corridor

D.7.1 ADID Wetland 198—MacArthur Woods

This wetland complex is described as a northern flatwoods dominated by Swamp white oak (*Quercus bicolor*) and American elm (*Ulmus americana*), a floodplain forest dominated by silver maple (*Acer saccharinum*) and cottonwoods (*Populus deltoides*), and a shrub swamp dominated by buttonbush (*Cephalanthus occidentalis*) and red osier dogwood (*Cornus stolonifera*). The primary functions of this wetland are stormwater storage and sediment/toxicant retention and is valued as a high quality plant community. The description of this wetland was verified during the field screening that was conducted. The total wetland size in the vicinity of the project is 0.1 ha (0.26 ac), but extends for long distances outside the study area. Approximately 14.8 ha (36.57 ac) of the overall wetland complex are considered ADID. Due to its configuration relative to the proposed roadway, this wetland is impacted in two separate areas. These were identified in the field as 60-11 and STM-27. Wetland segments 60-11 and STM-27 were assessed as being a low quality depressional area during the field verification. Approximately 0.06 ha (0.15 ac) of 60-11 and 0.008 ha (0.02 ac) of STM-27 would be impacted, totaling 0.06 ha (0.16 ac) or approximately 0.4-percent of ADID wetland 198. The proposed impacts are the result of mainline roadway construction and associated embankment.

This minimal impact would not cause a loss of function for this wetland. However, this ADID wetland consists of high quality natural areas within a larger ADID wetland complex. While impacts to wetland functions would be considered minimal, additional minimization and avoidance measures should be developed during the engineering phase to reduce impacts to high quality areas. The habitat function that this wetland provides cannot be easily mitigated and therefore additional measures may be required to minimize functional impacts.

D.8 I-94 Corridor

D.8.1 ADID Wetland 91

This wetland is described by the Lake County ADID study as a cattail marsh and sedge meadow. This wetland is also in the Middle Fork of the Chicago River watershed. The primary functions of this wetland are sediment / toxicant retention and is valued as high quality, diverse plant community. Open water portions of this area provides waterfowl habitat. The description of this wetland was verified during the field screening that was conducted. The total wetland size in the vicinity of the project is 49.6 ha (122.5 ac), all of which is considered ADID wetland. The proposed project would unavoidably impact approximately 0.28 ha (0.7 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway (94-11) was characterized as a moderate quality forested wetland during the field verification. The impacts are as a result of the construction of the mainline roadway and associated embankment.

The impacts to this wetland as a result of this alternative are approximately 0.6-percent of the ADID wetland within the vicinity of the project. This minimal impact would not cause a loss of function for this wetland. This ADID wetland also consists of high quality natural areas within a larger ADID wetland complex. While impacts to wetland functions would be considered minimal, additional minimization and avoidance measures should be developed during the engineering phase to reduce impacts to high quality areas. The habitat function that this wetland provides cannot be easily mitigated and therefore additional measures may be required to minimize functional impacts.

D.8.2 ADID Wetland 99—Headwaters of the Middle Fork of the North Branch of the Chicago River

This wetland consists primarily of an emergent cattail marsh. ADID sites 97 and 98 are part of this large complex. The primary functions of this wetland are sediment / toxicant retention and is valued as high quality wildlife habitat with an abundance of potential nesting areas for birds. The description of this wetland was verified during the field screening that was conducted. The total wetland size in the vicinity of the project is 3.37 ha (8.32 ac), but extends for long distances outside the study area. Approximately 3.46 ha (8.56 ac) of the overall wetland complex are considered ADID. The proposed project would unavoidably impact approximately 0.01 ha (0.03 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway (94-10) was characterized as a moderate quality forested wetland during the field verification. The impacts are as a result of the construction of the mainline roadway and associated embankment.

The impacts to this wetland as a result of this alternative are approximately 0.3-percent of the ADID wetland within the vicinity of the project. This minimal impact would not cause a loss of function for this wetland. However, this ADID wetland consists of high quality natural areas within a larger ADID wetland complex. While impacts to wetland functions would be considered minimal, additional minimization and avoidance measures should be developed during the engineering phase to reduce impacts to high quality areas. The habitat function that this wetland provides cannot be easily mitigated and therefore additional measures may be required to minimize functional impacts.

D.8.3 ADID Wetland 108—Oak Grove

This wetland consists of a sedge meadow and wet mesic prairie communities within the Middle Fork of the Chicago River watershed. The primary functions of this wetland are sediment/toxicant retention. This wetland is a designated Illinois Natural Areas Inventory site and contains state threatened or endangered plant species. The description of this wetland was verified during the field screening that was conducted. The total wetland size in the vicinity of the project is 9.6 ha (23.6 ac). Approximately 11.7 ha (28.9 ac) of the overall wetland complex are considered ADID. The proposed project would unavoidably impact approximately 0.4 ha (1.02 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway (94-9) was characterized as a moderate quality forested wetland during the field verification. The impacts are as a result of the construction of the mainline roadway and associated embankment.

The impacts to this wetland as a result of this alternative are approximately 3.5-percent of the ADID wetland within the vicinity of the project. This ADID wetland consists of high quality natural areas within a larger ADID wetland complex. While impacts to wetland functions would be considered minimal, additional minimization and avoidance measures should be developed during the engineering phase to reduce impacts to high quality areas. The habitat function that this wetland provides cannot be easily mitigated and therefore additional measures may be required to minimize functional impacts.

D.8.4 ADID Wetland 128

This wetland is described by the Lake County ADID study as a sedge meadow dominated by lake sedge (*Carex lacustris*) and tussock sedge (*Carex stricta*) and wet prairie dominated by prairie cordgrass (*Spartina pectinata*) and big bluestem (*Andropogon gerardii*). This wetland is also in the Middle Fork of the Chicago River watershed and is part of a complex that includes ADID wetlands 128 through 135 and 145, which includes the Middle Fork Savanna. The primary functions of this wetland are sediment/toxicant retention and is valued as high quality, diverse plant community. The description of this wetland was verified during the field screening that was conducted. The total wetland size in the vicinity of the project is 42 ha (103.7 ac). Approximately 48.3 ha (119.4 ac) of the overall wetland complex are considered ADID. The proposed project would unavoidably impact approximately 0.04 ha (0.11 ac) of this ADID wetland. The wetland in the vicinity of the proposed roadway (94-5) was characterized as a moderate quality forested wetland and cattail marsh during the field verification. The impacts are as a result of the construction of the mainline roadway and associated embankment.

The impacts to this wetland as a result of this alternative are approximately 0.09-percent of the ADID wetland within the vicinity of the project. This minimal impact would not cause a loss of function for this wetland. This ADID wetland also consists of high quality natural areas within a larger ADID wetland complex. While impacts to wetland functions would be considered minimal, additional minimization and avoidance measures should be developed during the engineering phase to reduce impacts to high quality areas. The habitat function that this wetland provides cannot be easily mitigated and therefore additional measures may be required to minimize functional impacts.